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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,772	12/21/2001	Huayan Wang	1273	4705

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EXAMINER

CHANKONG, DOHM

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/029,772

Applicant(s)

WANG ET AL.

Examiner

Dohm Chankong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1> This action is in response to Applicant's appeal brief, filed 9.5.2006.

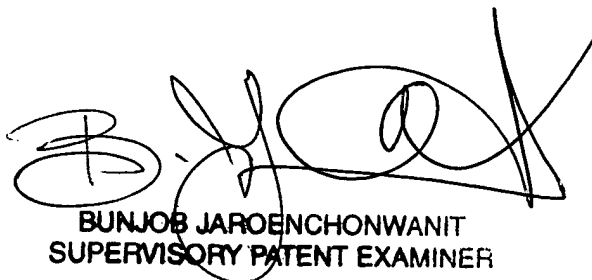
In view of the Appeal Brief filed on 9.5.2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:



BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER

2> This is a non-final rejection. Claims 1-28 are presented for further examination.

Claim Rejections - 35 USC § 103

3> The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4> Claims 1-7, 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli, US 6,260,029 in view of Cantu et al, U.S Patent Publication No. 2001/0020228 ["Cantu"].

5> As per claim 1 and 10, Critelli teaches a security envelope, comprising: a barcode in a two-dimensional symbology located on the security envelope, the barcode encoding (Fig 8, item 38):

a public component (shipping information, postal verification information, Col. 4, lines 10-15; Fig. 1, item 36; Fig 8, item 38), comprising a digital signature signed by the sender encrypted by the private key of the sender (Col. 3, lines 1-5); and

a private component (non-shipping information, advertising material, Col. 3, lines 47-57), comprising a digital signature signed by the sender (Col. 2, lines 60 - Col. 3, lines 5; Col. 3, lines 47-66; Col. 4, lines 1-14).

Critelli does not explicitly teach a private component, encrypted by the public key of the receiver.

In a similar system dealing with encryption, Cantu teaches a public component that comprising a digital signature signed by the sender encrypted by the private key of the sender

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[0055-0061] and a private component comprising a digital signature signed by the sender encrypted by the public key of the receiver [0055-0061]. Cantu teaches specifically that a sender encrypts a message with the recipient's public key to "provide the recipient with assurance that the message is indeed intended for the recipient." Cantu also teaches encrypting the message with the sender's private key to "assure the recipient the identity of the sender." Cantu further discloses that such encryption techniques can be applied to barcodes [0101].

Thus, it would have obvious to one of ordinary skill in the art to incorporate Cantu's encryption techniques into Critelli's barcode system. In particular, it would have been obvious to incorporate Cantu's teaching of utilizing both a recipient's public key and a sender's private key to encrypt a barcode and to provide assurances to both the recipient and sender that the message is secure.

6> As per claim 2 and 11, Critelli and Cantu teach the public component and the private component each include a digital mail identification (Critelli, Col. 4, lines 55 – Col. 5, lines 10, Fig 8; Col. 6, lines 45-55, wherein the private identification is portions of the mailing the sender wish to include or not include within the mail piece depending upon the target audience of the specific mailing);

the public mail identification is the barcode that identifies the public component information, i.e. barcode 36, Fig 2).

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7> As per claim 3 and 12, Critelli and Cantu teaches the barcode further encodes return address information (Critelli, Col. 2, lines 35-50).

8> As per claim 6 and 15, Critelli and Cantu teaches the barcode further encodes stamp information (Critelli, Col. 2, lines 35-50).

9> As per claim 4 and 13, Critelli and Cantu teach the barcode further encodes information relating to the physical characteristics of the security envelope (Critelli, Col. 2, lines 35-50).

10> As per claim 5 and 14, Critelli and Cantu teach the information relating to the physical characteristics of the security envelope include at least one of:

- a. the date the security envelope was sealed (Critelli, Col. 2, lines 42-43, the envelope was stamped and then mailed out at a particular location);
- b. the size of the security envelope; and
- c. the weight of the security envelope.

11> As per claim 7, Critelli and Cantu teach the security envelope further comprises a physical authentication identification (Critelli, Fig 8, item 18) and wherein the barcode further comprises a digital representation of the physical authentication identification (Critelli, Fig 8, item 38).

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12> Claim 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli and Cantu, as applied to claim 1, further in view of Applicant Admitted Prior Art (hereinafter AAPA).

13> As per claim 8, Critelli and Cantu do not explicitly teach an optically clear epoxy with air bubbles suspended therein.

However, AAPA teaches the above sections in page 5 of specification. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Cantu and AAPA because the teaching of AAPA to allow where the physical authentication identification comprises an optically clear epoxy with air bubbles suspended therein would improve the security measures for Critelli and Cantu's system by encoding additional information using another type of security technique within the barcode.

14> As per claim 9, Critelli and Cantu do not explicitly teach the physical authentication identification comprises a cloth made from non-woven 40 micron diameter polymer fibers.

However, AAPA discloses the above section in page 5 of specification. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli and Cantu and AAPA because the teaching of AAPA to allow where the physical authentication identification comprises a cloth made from non-woven 40 micron diameter polymer fibers would improve the security measures for Critelli and Cantu's system by encoding information using additional security technique within the barcode.

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15> As per claims 16-17, claims 16-17 are rejected for the same reasons as rejection to claims 8-9 above respectively.

16> Claim 18-21 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli and Cantu, as applied to claim 1, further in view of Moore US 5,917,925.

17> As per claim 18, Critelli and Cantu do not explicitly teach:  
measuring the physical identification information;  
decoding the digital mail identification; and  
comparing the measured physical identification information with the decoded digital mail identification.

However, Moore teaches the above section in the sample sections of Col. 8, lines 50-66 ("generating a unique pattern comprising an encoded input data entry stored on a mass storage device accessible by a CPU where the input data comprises...a unique mailpiece weight, and time and date information"), wherein the decoded information are compared with the pre-stored information in a database, which was measured and entered into the database at one point or another, the comparison takes place to identify the use of authentic indicia marks by unauthorized personnel, or identify the use of authorized indicia without proper fee payment or to identify improperly distributed mailpieces, or to obtain additional information on the inspected mail piece.

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Cantu and Moore because the teaching of Moore to allow measuring the physical identification information; decoding the digital mail



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identification; comparing the measured physical identification information with the decoded digital mail identification would improve the security measures for Critelli and Cantu's system by checking to see if the information received is the correct information pertaining to the user.

18> As per claim 19, Critelli, Cantu and Moore teach the method as in claim 18, wherein at least one of the steps of (1) measuring the physical identification information, and (2) decoding the digital mail identification is accomplished using an optical scanner (Critelli, Col. 4, lines 15-20).

19> As per claim 20, Critelli and Cantu do not explicitly teach the step of comparing the measured physical identification information with the decoded digital mail identification is accomplished using a mobile computer.

However, Moore teaches the above section in Col. 5, lines 1-10 and Col. 26, lines 37-54, where the mobile computer is the field reader. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Cantu and Moore and Critelli because the teaching of Moore to allow wherein the step of comparing the measured physical identification information with the decoded digital mail identification is accomplished using a mobile computer would improve the mobility for Critelli and Cantu's system by extending this type of operation into the field carried by company workers.

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20> As per claim 21, Critelli and Cantu do not explicitly teach transmitting the measured physical identification information and the decoded digital mail identification to a wired computer network via a wireless medium.

However, Moore teaches the above section on sample section of Col. 26, lines 37-56, Col. 11, lines 5-20. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Cantu and Moore because the teaching of Moore to allow transmitting the measured physical identification information and the decoded digital mail identification to a wired computer network via a wireless medium would improve the storage ability and mobility for Critelli and Cantu's system by keeping track of all the events occurring with the package scanning while in a distributed wireless environment.

21> As per claim 23, claim 23 is rejected for the same reasons as rejection to claim 1, 10, 18 above.

22> As per claim 24-26, claims 24-26 are rejected for the same reason as rejection to claims 2, 8-9 above respectively.

23> As per claim 27, Critelli and Cantu do not explicitly teach a wired computer network capable of communication with the at least one mobile computers via a wireless medium. However, Moore teaches a wired computer network capable of communication with the at least one mobile computers via a wireless medium (Col. 5, lines 1-15). System of Moore

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teaches of field readers reading information on the field and eventually interconnects with the wired system for information updates. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Cantu and Moore because the teaching of Moore to allow a wired computer network capable of communication with the at least one mobile computers via a wireless medium would improve mobility for Critelli and Cantu's system by keeping track of all the events occurring with the package scanning while in a distributed wireless environment.

24> Claim 18-20 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli and Cantu, as applied to claim 1, further in view of Pavlidis et al, U.S Patent No. 5,504,322 ["Pavlidis"].

25> As per claim 18, Critelli and Cantu do not explicitly teach the claimed limitations. However Pavlidis discloses:

measuring the physical identification information [column 18 «lines 7-21»];  
decoding the digital mail identification [column 18 «lines 7-21»] and  
comparing the measured physical identification information with the decoded digital mail identification [column 18 «lines 7-21»].

Pavlidis discloses encoding physical information of an item that would allow easier identification of the particular item that matches desired physical information. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Cantu and Pavlidis because the teaching of Pavlidis to measure,

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decode and compare physical information would improve the security measures for Critelli and Cantu's system by providing a means for easily searching and identifying particular items (such as in a warehouse) that matches desired physical characteristics.

26> As per claim 19, Critelli, Cantu and Pavlidis teach the method as in claim 18, wherein at least one of the steps of (1) measuring the physical identification information, and (2) decoding the digital mail identification is accomplished using an optical scanner (Critelli, Col. 4, lines 15-20).

27> As per claim 20, Critelli and Cantu do not explicitly teach the step of comparing the measured physical identification information with the decoded digital mail identification is accomplished using a mobile computer.

However, Pavlidis teaches performing the comparison of the physical identification with decoded digital identification is accomplished using a mobile computer [Figure 21]. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Cantu and Pavlidis because utilization of a mobile computer would improve the mobility for Critelli and Cantu's system by extending this type of operation into the field carried by warehouse workers.

28> As per claim 23, claim 23 is rejected for the same reasons as rejection to claim 1, 10, 18 above.

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29> As per claim 24-26, claims 24-26 are rejected for the same reason as rejection to claims 2, 8-9 above respectively.

30> Claim 18, 19 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli and Cantu, as applied to claim 1, further in view of Vaghi et al, U.S Patent No. 6,571,22 ["Vaghi"].

31> As per claim 18, Critelli and Cantu do not explicitly teach the claimed limitations.  
Vaghi discloses:

measuring the physical identification information [column 2 «lines 15-24» : weighing an item];

decoding the digital mail identification [abstract : weight encoded as a barcode on the package]; and

comparing the measured physical identification information with the decoded digital mail identification [column 6 «lines 11-24»].

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Critelli, Cantu and Vaghi because Vaghi's teaching simplifies Critelli and Cantu's shipping system by encoding physical information, such as weight of a package within a barcode which enables easier verification and checking of heavy or unusual sized packages.

32> As per claim 19, Critelli, Cantu and Moore teach the method as in claim 18, wherein at least one of the steps of (1) measuring the physical identification information, and (2)

decoding the digital mail identification is accomplished using an optical scanner (Critelli, Col. 4, lines 15-20).

33> As per claim 23, claim 23 is rejected for the same reasons as rejection to claim 1, 10, 18 above.

34> As per claim 24-26, claims 24-26 are rejected for the same reason as rejection to claims 2, 8-9 above respectively.

35> Claims 22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Critelli,, Cantu, Moore and in further view of 'Official Notice'.

36> As per claim 22, Critelli and Moore do not explicitly teach the method as in claim 21, wherein the wired computer network is connected to the Internet and the transmitting the identification data to a wired computer network via a wireless medium uses a TCP/IP protocol. "Official Notice" is taken that the concept and advantages of providing for TCP/IP in a wireless network is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include wireless TCP/IP with Lewis and Moore because it would provide for a robust connection oriented transfer medium.

37> As per claim 28, claim 28 is rejected for the same reasons as rejection to claim 22 above.

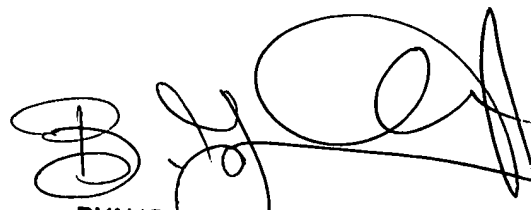
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942. The examiner can normally be reached on Tuesday-Friday [7:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC



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SUPERVISORY PATENT EXAMINER